IN THE CLAIMS:

1. (Currently Amended) A transmission apparatus comprising:

a master station for transmitting and receiving a video or audio transmission signal by utilizing a first minute-power wave, said transmission signal comprising slave station address information and master station receiving frequency information indicating a frequency at which a master station can receive a signal from a relay station;

a slave station for transmitting and receiving a video or audio transmission signal utilizing a second minute-power wave; and

a relay station located between the master station and the slave station, said master and slave stations located apart from each other by a distance longer than the reachable range of a first minute-power wave, wherein

said relay station is for receiving a first minute-power signal (f1) from ~~modulating at~~ the master station, modulating it to a different frequency (f2), and transmitting the modulated first minute-power signal to the slave station ~~return frequency~~

~~a demodulated portion of a first minute-power wave as a return signal, and for transmitting a return signal, thereby establishing a return transmission path between the relay station and the master station;~~

said relay station is for receiving from the master station, return frequency information (f0) as part of a first minute-power signal, demodulating a portion of a second minute-power signal received from the slave station, modulating the demodulated portion at the master station return frequency (f0), and transmitting the modulated portion of the second minute-power signal to the master station, thereby establishing a return transmission path between the relay station and the master station ~~modulating the frequency of a first minute-power wave received from the master station to a different frequency as a second minute-power wave and for transmitting a second minute-power wave;~~

said relay station is for transmitting information about a relay station receiving frequency at which the relay station receives a signal from the slave station;

said slave station is for recognizing that a transmission signal is a signal directed to said slave station; and

said slave station is for modulating and transmitting a response signal comprising video or audio information at said relay station receiving frequency, thereby establishing a transmission path between the master station and the slave station.

2. (Previously Presented) The transmission apparatus as described in Claim 1, wherein:

said master station is for transmitting a transmission signal comprising:

a standard television signal in the forward path from the master station to the slave station; and

a PCM audio signal and the information indicating the address of the slave station and the reception frequency specified by the slave station superposed on a video signal during the vertical blanking period of the video signal.

3. (Previously Presented) A transmission apparatus comprising:

a transmitter having an RF converter, for generating a standard television transmission signal in a transmission mode;

a receiver having an RF tuner for receiving the standard television transmission signal in a reception mode;

frequency detection means for detecting available frequencies for video transmission, within the reception band of the RF tuner, in advance of use;

detected frequency registration means for registering the detected frequencies, as a communication frequency list, in both of the transmitter and the receiver; and

spread spectrum communication means for spreading the power spectrum by changing the frequency within the range of the communication frequency list, and performing spread spectrum communication.

4. (Previously Presented) The transmission apparatus as described in Claim 3, further comprising transmission power control means for automatically changing the transmission power during the communication in accordance with the use frequency band width for keeping the power density per unit band width constant.

5. (Previously Presented) The transmission apparatus as described in Claim 3, further comprising frequency changing means for changing the frequency during the communication, in synchronization with the synchronous timing of the video signal.

6. (Previously Presented) The transmission apparatus as described in Claim 3, further comprising control signal superposition and transmission means for transmitting a control signal by superposing said control signal on the video signal in the blanking period, during the communication.

7. (Previously Presented) The transmission apparatus as described in Claim 3, further comprising audio signal superposition and transmission means for subjecting an audio signal to PCM, and for transmitting the PCM audio signal by superposing said PCM audio signal on the video signal in the blanking period, during the communication.

8. (Previously Presented) A transmission apparatus comprising:

first and second transmission/reception apparatuses each comprising a transmission apparatus described in Claim 3;

frequency changing order control means for controlling the frequency changing order, during the communication, so that the frequency is changed in one direction, from a higher frequency to a lower frequency or from the lower frequency to the higher frequency, within a range of the communication frequency list, and when the frequency reaches an end of the frequency list, the frequency is returned to the beginning of the frequency list; and

communication control means for controlling the first and second transmission/reception apparatuses to realize duplex communication, by using a frequency time table in which the first and second transmission/reception apparatuses always use different frequencies.

9. (Previously Presented) The transmission apparatus as described in Claim 8, further comprising communication frequency list update means which comprises the previously registered communication frequency list when starting the communication, and is for using a second communication frequency list obtained by duplicating the registered communication frequency list after the communication has been started, and is for updating the second communication frequency list by exchanging an indication of successful/unsuccessful communication between the first and second transmission/reception apparatuses.

10. (Previously Presented) The transmission apparatus as described in Claim 3, further comprising:

ID storage means for storing an identification number (hereinafter referred to as an ID) stored in the transmission apparatus during manufacture; and

ID inquiry and registration means for performing mutual inquiry of IDs with another transmission apparatus, which is permitted to have communication in advance of use, and registering the ID.

11. (Previously Presented) The transmission apparatus as described in Claim 10, further comprising:

frequency setting means for always executing the reception mode in advance of the transmission mode to detect frequency time tables of all other transmission apparatuses which are performing transmission within a same wave area, and for performing transmission by using a first frequency time table a use frequency of which is always different from the frequencies of said all other transmission apparatuses; and

retransmission means for performing retransmission by using a second frequency time table different from said first frequency time table when a transmission signal from another apparatus which has requested communication cannot be detected even when a predetermined period of time has passed after starting the transmission mode.

12. (Previously Presented) The transmission apparatus as described in Claim 10, further comprising output stop means for stopping output of original audio or video information, when the ID which is permitted to have communication cannot be confirmed in the reception mode.

13. (Previously Presented) A transmission method for mutually transmitting video and audio transmission signals between a master station and a slave station by utilizing a minute-power wave, comprising:

locating a relay station between the master station and the slave station which are located apart from each other by a

distance longer than the reachable range of the minute-power wave;

generating a transmission signal from the master station comprising, in addition to original audio or video information, information indicating an address of the slave station, and information indicating a frequency at which the master station receives a signal from the relay station;

modulating by said relay station the frequency of the minute-power wave received from the master station to a different frequency and outputting said different frequency;

transmitting by said relay station information about a frequency at which the relay station receives a signal from the slave station; and

modulating by the slave station the minute-power wave to the frequency specified by the relay station and transmitting the video or audio, thereby establishing a transmission path between the master station and the slave station, when the slave station recognizes that the transmission signal is a signal directed to the slave station.

14. (Previously Presented) The transmission method as described in Claim 13, further comprising:

using a standard television signal as the transmission signal in the forward path from the master station to the slave station; and

superposing a PCM audio signal and the information indicating the destination station and the reception frequency specified by the slave station on a video signal during the vertical blanking period of the video signal.

15. (Previously Presented) A transmission method for performing transmission between a transmitter having an RF converter that generates a standard television transmission signal in a transmission mode, and a receiver having an RF tuner that receives the standard television signal in a reception mode, comprising:

detecting, in advance of use, frequencies for video transmission within a reception band of the RF tuner;

registering the detected frequencies, as a communication frequency list, in both of the transmitter and the receiver; and

spreading the power spectrum by changing the frequency within the range of the communication frequency list, thereby performing spread spectrum communication.

16. (Previously Presented) The transmission method as described in Claim 15, further comprising automatically changing the transmission power during the communication in accordance with the use frequency band width so as to keep the power density per unit band width constant.

17. (Previously Presented) The transmission method as described in Claim 15, comprising changing the frequency during the communication in synchronization with the synchronous timing of the video signal.

18. (Previously Presented) The transmission method as described in Claim 15, transmitting a control signal during the communication by superposing the control signal on the video signal in the blanking period.

19. (Previously Presented) The transmission method as described in Claim 15, further comprising, during the communication, subjecting an audio signal to PCM, and transmitting the PCM audio signal by superposing the PCM audio signal on the video signal in the blanking period.

20. (Previously Presented) A transmission method, comprising:

performing by each of first and second transmission/reception apparatuses the transmission method described in Claim 15;

controlling a frequency changing order during the communication so that the frequency is changed in one direction, from a higher frequency to a lower frequency or from the lower frequency to the higher frequency, within a range of the communication frequency list, and when the frequency reaches an end of the frequency list, the frequency is returned to the beginning of the frequency list; and

controlling the first and second transmission/reception apparatuses to realize duplex communication, by using a

frequency time table in which the first and second transmission/reception apparatuses always use different frequencies.

21. (Previously Presented) The transmission method as described in Claim 20, further comprising:

using the previously registered communication frequency list when starting the communication and, after the communication has been started, using a second communication frequency list obtained by duplicating the previously registered communication frequency list, and

updating the second communication frequency list by exchanging a signal indicating successful/unsuccessful communication between the first and second transmission/reception apparatuses.

22. (Previously Presented) The transmission method as described in Claim 15, comprising:

storing an identification number (hereinafter referred to as an ID) in the transmission apparatus during manufacture; and

in advance of use, performing mutual inquiry of IDs with another transmission apparatus which is permitted to have communication, and registering the ID.

23. (Previously Presented) The transmission method as described in Claim 22, comprising:

always performing the reception mode in advance of the transmission mode to detect frequency time tables of all other transmission apparatuses which are performing transmission within a same wave area, and performing transmission by using a frequency time table a use frequency of which is always different from those of these other transmission apparatuses; and

performing retransmission by using a frequency time table different from said frequency time table when a transmission signal from another apparatus that has requested communication cannot be detected even when a predetermined period of time has passed after starting the transmission mode.

24. (Previously Presented) The transmission method as described in Claim 22, comprising:

not outputting the original audio or video information when the ID which is permitted to have communication cannot be confirmed in the reception mode.